

06/04/2019

VIA ELECTRONIC FILING

Honorable Ajit Pai, Chairman
Honorable Michael O'Rielly, Commissioner
Honorable Brendan Carr, Commissioner
Honorable Jessica Rosenworcel, Commissioner
Honorable Geoffrey Starks, Commissioner
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Reference: WT Docket No. 17-200, In the Matter of Review of the Commission's Rules Governing the 896-901/935-940 MHz Band

Dear Chairman Pai and Commissioners O'Rielly, Carr, Rosenworcel and Starks:

I. INTRODUCTION

Burns & McDonnell is a full-service engineering, architecture, construction, environmental and consulting solutions firm, based in Kansas City, Missouri. Our staff of 7,000 includes engineers, architects, construction professionals, planners, estimators, economists, technicians and scientists, representing virtually all design disciplines. We plan, design, permit, construct and manage facilities all over the world, with one mission in mind: **Make our clients successful.** As the number one provider of engineering services to electric power utilities our clients are deploying grid modernization technology which depends on reliable communications. The billions of dollars that are being invested in this critical infrastructure are being slowed due to the availability of spectrum to build private broadband networks which are needed to realize the benefits of a modern power system that supports two way power flow and is more resilient.

Thank you for considering the following comments in response to the Notice of Proposed Rulemaking ("NPRM") in the above-captioned matter and is extremely interested in the rapid adoption of a broadband solution in the 900 MHz band. There is growing need for spectrum to meet the increasing demands for transformative wireless broadband services and technologies by our utility customers. We believe that a 900 MHz private enterprise network will allow utilities to align their communications capabilities with our evolving electric grid needs. Sub 1 GHz spectrum is especially important for building out rural areas of the utilities service territories. The proposal from pdvWireless, Inc. (PDV) and the Enterprise Wireless Alliance (EWA), and now the Federal Communication Commission (FCC) Notice of Proposed Rulemaking (NPRM), provide a vehicle for the integration of broadband into the communications facilities of many public utilities. The key is speed. Burns & McDonnell is working for multiple clients with funded ongoing projects which are seeking broadband solutions now and are prepared to build in 2019. Without a clear path to the spectrum that is needed these investments of hundreds of millions of dollars across the country are being stifled. The 900 MHz band allocation can play an important role in providing needed spectrum for industry IoT applications, critical infrastructure, and private broadband networks. As utility companies develop and deploy smart grids, they need a vast number of wireless smart meters, sensors, and control devices to monitor various conditions of the grid

to optimize energy efficiency as new demands continue to emerge. Oil and gas industries can also leverage LTE for enhanced communications utilizing handheld devices, cameras, etc. for improved safety and reliability of equipment and processes. Our request is that you act quickly to adopt an Order that will establish rules providing for a private enterprise broadband solution in the band while preventing holdouts from delaying the amazing benefits that broadband can bring to the utility sector.

II. BURNS & MCDONNELL SUPPORTS BAND REALIGNMENT TO CREATE BROADBAND LICENSES

Burns & McDonnell supports the Commission's proposal to realign the 900 MHz band to create a new broadband segment and urges the Commission to maximize the availability of this band for broadband service while maintaining sufficient spectrum for existing 900 MHz narrowband operations. The Commission's recent Notice of Proposed Rulemaking (NPRM) to re-align the 900 MHz band for broadband services is a significant, positive step forward for our utility clients. As a service partner to many utilities requiring wireless communications equipment and / or services that provide for Smart Grid Communications, our critical infrastructure client base includes some of the largest utilities and other industries in the United States. Those utilities are now seeking equipment that can be deployed quickly with limited development costs. Having the 900 MHz band as a private broadband option, our clients' industrial requirements could be met in a time frame that is consistent with their need for a standard platform for wireless communications. It would also allow us to expand our Private LTE offerings and continue the future development and constant innovation of the utility industry.

III. LICENSING AND OPERATING RULES

Burns & McDonnell supports the adoption of a longer license term for the 900 MHz broadband license. However, Burns & McDonnell opposes the adoption of performance requirements based on population coverage and urges the Commission to adopt alternative metrics that more appropriately accommodate the needs of utilities and other private wireless users.

A. The Commission Should Adopt a Longer License Term for the 900 MHz Broadband License

The Commission proposes to adopt a 15-year term for broadband licenses in the 900 MHz band in recognition of the fact that a licensee in this band would face relocation and band clearance issues that may delay the start of initial deployment of new services. Burns & McDonnell agrees that a longer license term is warranted in light of the potential complexity of, as well as the time and expense required, for completing the relocation and realignment process in the 900 MHz band. Burns & McDonnell therefore supports the Commission's proposed 15-year license term, but suggests that a longer term of up to 20 years may be more appropriate for a 900 MHz broadband license given the characteristics and nature of this band and of the incumbent operations.

B. The Commission Should Adopt Performance Requirements Appropriate to the Anticipated Use of the 900 MHz Broadband Segment

Burns & McDonnell opposes the Commission's proposal to adopt performance requirements for the 900 MHz broadband license that are based on population coverage and urges the

Commission to consider an alternative metric that better aligns with the Commission's stated purpose for realigning the 900 MHz band. A substantial amount of the critical infrastructure that would be supported by 900 MHz broadband operations, such as electric transmission lines and generating plants, oil and gas pipelines and refineries, etc., are intentionally located away from densely populated areas, yet this infrastructure delivers critical public services to hundreds of millions of consumers. Any performance requirements based on the population covered by the licensee's signal would therefore penalize the licensee for deploying the 900 MHz broadband service around the very infrastructure that the service is intended to support. In considering an appropriate performance metric for the 900 MHz broadband license, the Commission should recognize that the use of this spectrum to support vital public services provides significant benefits to a much greater percentage of the population than is actually "covered" by a licensee's signal. Burns & McDonnell recommends that the Commission adopt performance requirements based on the actual service and benefit to the public that the use of the spectrum is providing rather than on arbitrary coverage percentages. Given the anticipated use of the 900 MHz broadband segment by private wireless users such as electric utilities and other entities, the adoption of similar alternative performance standards is necessary to accommodate the needs and operational realities of such users. For similar reasons, Burns & McDonnell agrees with the Commission's suggestion to apply a more general flexible use standard to the performance requirements for the 900 MHz broadband segment. In particular, the Commission should provide 900 MHz broadband licensees the flexibility to deploy other narrowband services such as narrowband-Internet of Things ("NB-IoT"). Together with broadband-enabled applications and use cases, narrowband services such as NB-IoT are and will continue to be part of the utility technology portfolio, ensuring safe, reliable, and efficient delivery of critical public services. The Commission should therefore provide utility users the flexibility to deploy such services in a way that best meets each user's particular needs. Finally, Burns & McDonnell urges the Commission to refrain from applying any new renewal requirements, such as additional renewal term construction obligations. Utility and other users deploy private wireless systems in order to support their own internal communications and operational needs. The imposition of additional construction obligations as a condition of license renewal would effectively require private wireless users to build and deploy more than they may actually need to support their operations, thus incurring significant expense without any benefit to themselves or to consumers.

IV. BURNS & MCDONNELL URGES THE COMMISSION TO ADOPT A BAND ALIGNMENT TRANSITION THAT MAKES THE SPECTRUM AVAILABLE AS QUICKLY AS POSSIBLE

No matter the approach the Commission adopts for realigning the band, clearing the band as quickly as possible allows the licensees to begin deploying services and benefiting from a broadband network quickly. There may also need to be some mandatory actions to clear a sufficiently contiguous amount of spectrum in a short, but reasonable timeframe. The Commission should minimize any potential regulatory bottlenecks that could hinder making the spectrum available in a timely manner. This is imperative so that utilities can remain competitive in this global digital economy.

V. Conclusion

Moving forward, the 900 MHz band offers our clients an opportunity to pursue a range of capabilities and options that not only will help the utility industry, but very likely will help other industries that are similarly situated. Through the evolution of the Industrial IoT marketplace, the availability of private networks that can meet our safety and security needs and the global scale of LTE development, we believe that moving the 900 MHz band to market can be transformative.

We applaud the Commission for its efforts in this proceeding to date but suggest that speed is key. Accordingly, we respectfully request that you move quickly to facilitate the retuning and clearing of this band so that the potential benefits of this broadband option are immediately available for our critical infrastructure clients.

Sincerely,



Bruce Albright

Burns & McDonnell
Sr Telecommunications Engineer
9400 Ward Parkway
Kansas City, MO 64114
816-349-6784